

RECEIVED  
CENTRAL FAX CENTER  
AUG 07 2007

## AMENDMENTS

### In the Claims

#### Current Status of Claims

##### Claims 1 - 36(canceled)

1 37.(withdrawn) A circular extrusion die comprising  
2 distribution section for forming at least a first molten polymer material into a generally even  
3 circular flow, and  
4 bodily separate from said distribution section an exit section comprising  
5 an annular main channel with generally cylindrical or conical walls for receiving said generally  
6 circular flow of said first polymer material and conducting the same to an annular exit orifice to exit  
7 there from as a tubular film structure,  
8 said exit section also comprising a channel system spaced radially from said main channel  
9 for extrusion from the circumference of said exit section of a circular array of narrow strands of a  
10 second molten polymer material,  
11 said channel system ending in a circular row of internal orifices opening into a circular wall  
12 portion of the main channel upstream of said exit orifice so that said circular array of said second  
13 polymer material merges with the circular flow of said first polymer material as circumferentially  
14 spaced strands superimposed on said circular flow.

1 38.(withdrawn) A circular extrusion die according to claim 37 wherein said channel system  
2 for said circumferential extrusion begins at at least one inlet in said exit section and comprises  
3 for delivering said second polymer material to each said internal orifice a labyrinthine sub-  
4 channel system communicating at one end with such inlet and at the other end with the respective  
5 internal orifice,  
6 said sub-channel system comprising at least three channel-branchings between said ends to  
7 promote a balanced division of polymer flow to said internal orifices.

##### Claims 39 - 73(canceled)

1 74.(withdrawn) A circular extrusion die according to claim 38 which further comprises a  
2 small circumferential channel in said wall portion of said circular main channel upstream of the exit  
3 thereof, said internal orifices opening in common into said small channel.

**75.(withdrawn)** An extrusion die according to claim 37 which further comprises an additional circular channel for extruding a circular flow of a third molten polymer material on the side of said generally circular flow of said first polymer material facing said circular array of narrow strands of said second material upstream of the point where the circular array merges with first circular flow to thereby form on the first circular flow of said first polymer material a continuous layer of said third polymer material underlying said circular array of narrow strands upon its merger with the first circular flow.

**76.(canceled)**

77.(currently amended)      The A cross-laminate according to claim 76118 wherein:  
the pattern of the discontinuous layer of the film A comprises at least one first array of  
substantially parallel strands,  
the pattern of the discontinuous layer of the film B comprises at least one second array of  
substantially parallel strand, and  
the strong bonds comprise crossing points of the two arrays formed by direct lamination the  
strands in the respective arrays are in contact with one another at their crossing points and are of a  
polymer material such as to be directly laminated to each other at said crossing points.

78.(currently amended) The A cross-laminate according to claim 76119, wherein:  
The polymer material of the strands of at least one of said arrays discontinuous layer of at least one of the films A and B comprises coloration material in an sufficient amount, a coloration, or an amount and coloration sufficient to render the strands at least one colored discontinuous layer visible through at least one side of the cross-laminate.

79.(currently amended) The A cross-laminate according to claim 76118, wherein:  
the a thickness of the discontinuous layers ~~strands in the first surface layer of each of said~~  
the films A and B is ~~are~~ not greater than 20% of the a thickness of their respective films.

80.(currently amended) The A cross-laminate according to claim 76118, wherein:  
the a collective area of the discontinuous layers of the films A and B comprises strands in

1 ~~each of said first surface layers constitutes not no more than 60% of the a surface area of the their~~  
2 ~~respective film sides.~~

1 81.(currently amended) The A cross-laminate according to claim 76118, wherein the a  
2 thickness increase in each of said the films A and B at the locations where the strands discontinuous  
3 layers are present is at most 20% of the a film thickness in adjacent strand-free regions thereof  
4 where the discontinuous layer are absent.

1 82.(currently amended) The ~~A~~ A cross-laminate according to claim 7677, wherein the a  
2 distance from the a center-to-center of adjacent pairs of strands in each array is between 2 mm and  
3 40 mm.

1 83.(currently amended) The A cross-laminate according to claim 76119, wherein:  
2 the lamination a strength at said crossing points of the thin strands of said arrays is of the  
3 strong bonds are at least 40 g cm<sup>-1</sup>, as measured by a peel test carried out on narrow specimens of  
4 the cross-laminate at a velocity of about 1 mm sec<sup>-1</sup>, and  
5 and the lamination a strength in the strand-free regions is of the weak bonds are less than or  
6 equal to at the highest 75% of the bonding strength of the strong bonds between the strands at said  
7 the crossing points, as measured by said the peel test.

1        **84.(canceled)**

1 85.(currently amended) The A cross-laminate according to claim ~~76~~84, which comprises

2 wherein:

3 on at least one of its outer films, a coextruded an exterior layer formed on an exterior surface  
4 of at least the film B or the second B film layer of comprising a polymer material adapted to enhance  
5 a surface property of the laminate, where the property is selected from the group consisting of its  
6 heat-sealing capability or and its frictional properties property.

1 86.(currently amended) The A cross-laminate according to claim 76118, wherein:  
2 the main layer of each of said the two films A and B consists essentially of polyethylene or  
3 polypropylene.

1 87.(currently amended) The A cross-laminate according to claim 76119, wherein:

2 ~~in each of said films A and B:~~

3 the main layers is are selected from the group consisting of HDPE, LLDPE or a blend of the  
4 two,

5 the ~~continuous second surface bonding layers~~ is formed mainly of comprise LLDPE in  
6 admixture with 5 - 25% of a copolymer of ethylene having a melting point or a melting range within  
7 the temperature range of 50 - 80°C, and

8 the ~~strands in the first surface layers of said the films is~~ discontinuous layers comprise  
9 ~~selected from a polymer which consists~~ consisting essentially of a copolymer of ethylene having a  
10 melting point or a melting range within the temperature range of 50 - 100°C or a blend of such  
11 copolymer and LLDPE containing at least 25% of the ~~said the~~ copolymer.

1 88.(currently amended) The A cross-laminate according to claim 7787, wherein:

2 said the bonding second surface layers includes an adhesion modifying material to establish  
3 ~~a blocking between the contacting mutually facing strand-free regions thereof to aid in adhesion of~~  
4 the weak bonds.

1 89.(currently amended) The A cross-laminate according to claim 7677, wherein:

2 the pattern of the discontinuous layer the first surface layer on at least one of said the films  
3 A and B comprises at least two of said arrays of strands,

4 at least one of said the two arrays of strands being formed of a polymer material differing  
5 in appearance from the another of said the two arrays of strands and  
6 where the strands of the differing two arrays being are interspersed with one another.

1 90.(currently amended) The A cross-laminate according to claim 76118, wherein:

2 said ~~first surface layer on the discontinuous layers of~~ each of the films A and B constitutes  
3 at their highest 10% of the volume a height of their corresponding film.

1 91.(currently amended) The A cross-laminate according to claim 76118, wherein:

2 the an average melting point of the polymer material which constitutes of the strand-formed  
3 first layer discontinuous layer of each of said the films A and B is at least about 10°C lower than the

1 an average melting point of the polymer material of the ~~the~~ main layer of each of the films A and  
2 B.

1 92.(currently amended) The A cross-laminate according to claim 76118, wherein:  
2 the ~~an~~ average melting point of the polymer material ~~which constitutes of~~ the strand-formed  
3 first layer ~~discontinuous layer~~ of each of said ~~the~~ films A and B is at least about 15°C lower than the  
4 ~~an~~ average melting point of the polymer material of the ~~the~~ main layer of each of the films A and  
5 B.

1 93.(currently amended) The A cross-laminate according to claim 76118, which further  
2 comprises ~~comprising:~~  
3 a continuous ~~extrusion lamination bonding layer introduced between said films A and B to~~  
4 ~~laminate said films in said sandwich relation~~ interposed between the main layer and the  
5 ~~discontinuous layer of at least one of the films A and B.~~

1 94.(currently amended) The A cross-laminate according to claim 76118, wherein:  
2 the ~~a~~ thickness of the ~~strands in said first surface layer~~ discontinuous layers of each of said  
3 ~~the~~ films A and B is are not greater than 10% of the ~~a~~ thickness of their respective film.

1 95.(currently amended) The A cross-laminate according to claim 76118, wherein  
2 the ~~a~~ thickness increase of each of said ~~the~~ films A and B at the locations where the strands  
3 ~~are~~ discontinuous layer is present is at most 10% of the ~~a~~ film thickness in strand-free regions of the  
4 ~~films free of the discontinuous layer.~~

1 96.(currently amended) The A cross-laminate according to claim 76119, wherein:  
2 the lamination ~~a~~ strength of the weak bonds is ~~no~~ in said strand-free regions of said cross-  
3 ~~laminate is not~~ more than 50% of the lamination ~~a~~ strength of the strong bonds at said crossing  
4 ~~points of the strands thereof,~~ as measured by a peel test carried out on narrow specimens of the  
5 cross-laminate at a velocity of about 1 mm sec<sup>-1</sup>.

1 97.(currently amended) The A cross-laminate according to claim 7678, wherein the cross-  
2 ~~laminate has~~ having a thickness at the highest its thickest of about 0.3 mm, and:

1 wherein a ~~said film A is situated at one of its sides;~~  
2 ~~said film A~~ having its an exterior surface of the film A is corrugated to form a visible pattern  
3 of striations extending in one direction,  
4 ~~with the~~ where a spacing of said ~~the~~ striations ~~in said pattern~~ being at most about 3 mm,  
5 the main layer and ~~said second surface~~ the bonding layer of ~~said the~~ film A are substantially  
6 transparent to enable the ~~coloured~~ colored strands to be visible when the laminate is observed from  
7 ~~an A-side~~ one of the exterior surfaces of the cross-laminate, and  
8 the ~~a~~ depth of the corrugations is sufficient to impart a three-dimensional effect to ~~said the~~  
9 cross-laminate such that the strands appear to be spaced internally from the exterior surface of ~~said~~  
10 the film A a distance substantially greater than ~~the an~~ actual maximum thickness of ~~said the~~ film A.

1 98.(currently amended) The A cross-laminate according to claim 76118, wherein:  
2 ~~said first surface layer on the discontinuous layers of~~ each of the films A and B constitutes  
3 at their highest 5% of the ~~volume~~ a height of their corresponding film

1 99.(currently amended) The A cross-laminate according to claim 76118, wherein:  
2 the average melting point of the polymer material which constitutes the strand-formed first  
3 surface layer of each of ~~said the~~ films A and B is at least about 20°C lower than the average melting  
4 point of the polymer material which constitutes the main layer thereof.

1 100.(currently amended) The A cross-laminate according to claim 76118, wherein the distance  
PAGE 8/8 \* RCVD AT 8/7/2007 8:14:35 PM [Eastern Daylight Time] \* SVR:USPTO-EPXRF-1/10 \* DNIS:2738300 \* CSID:7139777011 \* DURATION (mm:ss):03:34

**BEST AVAILABLE COPY**